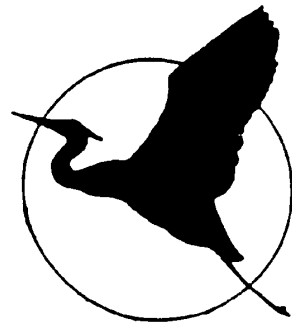


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May 8, 2007

**Comments on the Public Review Draft:
Phase 1 Total Maximum Daily Load for Nutrients
in B. Everett Jordan Reservoir, North Carolina**



Jordan Lake, July 2006, Doug Wakeman

The Haw River Assembly is a non-profit citizen organization working to protect and restore the Haw River and Jordan Lake. We were established in 1982, the year that North Carolina officially dedicated the opening of the new B. Everett Jordan Reservoir. Throughout the stakeholder process we have been the main voice urging that strong rules be drafted to reduce nutrient pollution to the lake. Through our own citizen water monitoring project and Lake Watch volunteers we are certain that these rules are needed if Jordan Lake is not to become even more impaired by excessive algae than it is today. Further impairment will be of great concern to the public at large who depend on Jordan Lake for drinking water, and use it as a recreational resource in an increasingly urban area. It is important habitat to a wonderful and diverse wildlife population, including nesting Bald Eagles that are a precious natural resource.

The process to reduce nutrient loading to Jordan Lake has dragged on for many years already. The state recognized the need for reductions in 1997, and established targets and an implementation schedule. Allowance of additional time for the dischargers has brought us to 2007 with still no rules adopted. In the meantime, there has been tremendous population growth and development in the watershed (10 counties that contain land that drains to Jordan Lake). The entire management area of Jordan Lake is now on the 303 (d) list – impaired for both exceedances of the chlorophyll *a* and the pH water quality standards (frequent pH readings over 9.0).



Algae bloom on Morgan Creek, Upper New Hope Arm of Jordan Lake, August 31, 2006, Doug Wakeman

This draft report is a very good summary of the entire process to date, including discussions of technical issues, which have been very controversial. Many of the wastewater dischargers and local governments where stormwater originates do not agree that these reductions are needed, *or* that Jordan Lake is actually impaired, *or* they should bear responsibility for cleaning it up. The costs of cleaning it up will be borne equally throughout the watershed, and is required under the legal framework of the Clean Water Act of the United States. Cleaning up polluted waters is mandated by this federal law, as well as HB 515, the North Carolina Clean Water Responsibility Act. We are disappointed that stronger guidance and participation has not been more evident from Region IV EPA. Frequent changes in EPA staff and lack of closer oversight has made this a much more difficult process than it needed to be. We believe those who are contributing to the pollution of Jordan Lake would benefit from understanding that the reduction in nutrients is not only important to North Carolina, but to the federal government as well.

Discussions about the science and technology of lake nutrient management could continue endlessly. We have participated in over 30 meetings to date where such discussions have taken place, and much interesting information has resulted from it. However, the problem is still there: Jordan Lake is impaired with too much algae.

Jordan Lake has historically been one of the most eutrophic lakes in North Carolina. Since the time that the lake was monitored extensively (1997 – 2001) for the nutrient model, new sources of nutrient pollution continue to grow, especially non-point sources.

The rapid growth of residential and commercial growth and the building of new highways and interstates has meant a continued flow of sediment down the Haw River and New Hope arms into Jordan Lake. As mentioned on page in the draft report, non-algal turbidity (suspended sediment) is currently limiting the growth of algae at Jordan Lake due to light obstruction. This means we already have a de facto nutrient management plan in place at the lake – sediment pollution. But it is not a plan to be proud of, and there are many forces at work in NC trying to reduce sedimentation and turbidity caused by suspended sediment in our waterways.



Muddy waters from construction (at top of photo) entering Jordan Lake from NE Creek, Oct .13, 2006, Elaine Chiosso

We support this draft TMDL for Jordan Lake that has been prepared by NC DWQ from work that has taken place over many years, and input from a wide stakeholder group. We believe DWQ has taken great pains to be fair and thorough, and we respect the scientists who have expended great efforts to reach this point.

We have the following specific concerns that we would like to see addressed in the final report:

- All three subwatersheds should be subject to the same and complete elements of the strategy. The explosive development of commercial and residential properties in the subwatershed of the Lower New Hope, including developments using on-site wastewater, should be addressed by the same rules as the Upper New Hope and Haw River arms.
- We are not convinced that the requirement for a Margin of Safety for the Jordan Lake TMDL has been met – since all assimilative capacity has been allocated. In addition, the goal is to not exceed by more than 10% the chlorophyll *a* standard for water quality. If it's a standard, we do not see how the target includes allowing it to be violated.
- In section 6.3 (Critical Conditions) the draft report notes that the years on which the model is developed are somewhat biased toward drier conditions, which has led to criticism by those who have opposed the rules. Regional forecasts of changing climatic conditions in this part of the nation, and in Piedmont NC, point to drier conditions as being more common due to effects of global warming. It would seem appropriate to consider the model years as predictive of future, more normal, weather conditions.
- The compliance schedule for nitrogen reductions by wastewater dischargers was significantly lengthened due to demands from regulated local governments. The timeline of 2011 for meeting the nitrogen and phosphorus reduction targets by major WTP's has been changed to 2016 for TN. Although the TP reduction has been brought forward to 2009, the nitrogen reductions must be earlier – back to 2011 – if we are to prevent a

serious water quality crisis at Jordan Lake. We do not believe that the model supports this delay. Section 7.2 (page 53) of the draft states that “EPA requires reasonable assurance that allocations will result in the water body of concern meeting water quality standards” and that “They will be implemented as expeditiously as practicable” We do not think the 2016 implementation date for nitrogen reductions meets that requirement.

Under “Future Efforts” (page 55) it is stated that this nutrient management strategy and TMDL represents an early phase of a long term restoration project and “that it may take many years before improvement Jordan Reservoir is noted “. The 2006 303 d listing of Jordan Lake for violations of pH standards means that the Phase II TMDL is already scheduled to begin in 2012. The lake is becoming more eutrophic, and more endangered each day.



Dead crappie, from fish kill at Jordan Lake, March 24, 2006 Doug Wakeman

We cannot continue to put off protecting Jordan Lake. We urge the state and EPA to move swiftly to implement rules to reduce nutrient pollution in Jordan Lake, without further delays.

Thank you for consideration of our comments. I have attached a copy of the “State of the Lake” report by the Haw River Assembly, and the resolution passed by the Chatham County Commissioners concerning the draft rules for Jordan Lake.

Elaine Chiosso
Executive Director